

**PROCESS FOR MONITORING AND CONTROLLING A NITRATING
PROCESS WITH THE AID OF AN ONLINE SPECTROMETER**

ABSTRACT OF THE DISCLOSURE

A process for monitoring and/or controlling a nitrating process, having the following steps:

- measuring inline infrared spectra of nitric acid content in a reaction mixture stream downstream of the nitration reaction, preferably near-infrared spectra,
- evaluating the measured spectra by means of a computer-assisted, matrix-specific calibration model for the purpose of determining the content of nitric acid,
- transmitting the results of spectrometric examination to a process control system,
- inputting the results of spectrometric examination for the purpose of specifying the content of nitric acid in the acid phase into a regulator (224) for control of the metering (207, 217) of nitric acid into a nitrating reactor.